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09/885,100	06/21/2001	Joo-Hyoung Lee	P56382	3922

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EXAMINER	
TRAN, TRANG U	
ART UNIT	PAPER NUMBER
2622	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/885,100	LEE ET AL.	
	Examiner	Art Unit	
	Trang U. Tran	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 February 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4-12,15-24 and 26-37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4-12,15-24 and 26-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed February 15, 2007 have been fully considered but they are not persuasive.

In re pages 13-15, applicants state that the rejection of independent claims 1 and 11 under 35 U.S.C. 102 for alleged anticipation is clearly inappropriate because the Examiner admitted (in paragraph 3 on page 4 of the final Office action of 20 May 2004(Paper No. 8) that Kuo et al '040 does not disclose a controller which adds a highlight signal to video signals to thereby increase the level of the composed video signals of the highlight portion, and does not disclose a controller which subtracts the highlight signal form the video signals to thereby decrease the level of the composed video signal of the highlight portion.

In response, the examiner respectfully disagrees. It is noted that claims 1 and 11 are rejected under 35 U.S.C. 103(a) in the final Office action of 20 May 2004 (Paper No. 8). However, after reconsideration of Kuo et al '040, it is found that claims 1 and 11 can be rejected under 35 U.S.C. 102(e) rather than 35 U.S.C. 103(a).

In re pages 15-17, applicants argue that independent claims 1 and 11, and their associated dependent claims, recite the invention in a manner distinguishable from the prior art so as to preclude rejection under 35 U.S.C. 103(a) because the Examiner does not provide support, in a form of citation to Kuo et al '040 or any other reference, for the statement of "inherency" in the previously quoted passage from the current Office action and that neither Kuo et al '040 nor any of the other references cited in the Office action

discloses or suggests the claimed that the displaying part comprises a control key part for controlling a size and a position of the highlight portion, and that the controller comprise an adjuster part for adjusting the picture in response to external to external signals adjusted by the control key part as recited in claims 1 and 37.

In response, the examiner respectfully disagrees. Kuo et al discloses in col. 4, lines 30-49 that "Moreover, the presenter can select one or more areas on the image by adding the edge of the selected areas to show portions o the image. In addition, different type of image processing can be performed in different selected areas and outside the selected areas. ...The aforementioned image processing can be the flicker of the image, the brightness adjustment, the contrast, and the color of the image". From the above passage it is clear that the present can adjust the brightness of the selected area on the image. The brightness adjustment can add the highlight signal to the video signals to thereby increase the level of the composed video signal of the highlight portion or subtract the highlight signal form the video signals to thereby decrease the level of the composed video signals of the highlight portion as recited in claims 1 and 11. Also from the above passage it is clear that the displaying part comprises a control key part (the remote controller disclosed in col. 5, lines 12-25) for controlling a size and a position of the highlight portion, and that the controller comprises an adjuster part for adjusting the picture in response to external signals adjusted by the control key part as required by claims 1 and 37.

In re pages 17-18, applicants state that the current rejection of claims 22, 27 thru 29, 31, and 34 under 35 U.S.C. 102(e) for alleged anticipation by Kuo et al '040 is not

proper because the Examiner admitted (in the final Office action of 20 May 2004(Paper No. 8) that Kuo et al '040 does not disclose a an image sharpness part for adjusting a signal size representing a borderline of a highlight portion according to a selection by selection means, and for supplying the adjusted signal size to the signal composing part.

In response, the examiner respectfully disagrees. It is noted that claims are rejected under 35 U.S.C. 103(a) in the final Office action of 20 May 2004 (Paper No. 8). However, after reconsideration of Kuo et al '040, it is found that claims can be rejected under 35 U.S.C. 102(e) rather than 35 U.S.C. 103(a).

In re pages 18-21, applicants argue that Kuo et al fails to disclose and image sharpness part connected between selection means ad a signal composing part for performing the function recited in claim 22.

In response, the examiner respectfully disagrees. As discussed in the last Office action, the claimed image sharpness part connected between selection means ad a signal composing part for performing the function recited in claim 22 is met by the digital image processor 300, when the presenter uses the remote controller to change the scope, position, color, brightness, and even the number of the selected area(s) as disclosed in col. 6, lines 6-24.

In re page 21, applicants argue that the claimed "signal composing part connected to said highlight signal generating part and to said signal generating means" and that the "image sharpness part is connected between said selection means and

said signal composing part" are not disclosed or suggested in the prior art cited by the Examiner.

In response, the examiner respectfully disagrees. As discussed in the last Office action that the claimed "signal composing part connected to said highlight signal generating part and to said signal generating means" and that the "image sharpness part is connected between said selection means and said signal composing part" are met by the OSP signal generator 330 and the digital image processor 300 of Kuo et al.

In re pages 21-22, applicants argue that it cannot be said that Kuo et al '040 discloses or even suggests the clock generating part recited in claim 32.

In response, the examiner respectfully disagrees. As discussed in the last Office action that the claimed the clock generating part recited in claim 32 is met by the pixel clock of Kuo et al because the pixel clock is used to set up a size and a position of the highlight portion as discussed from col. 6, line 40 to col. 7, line 6.

In re pages 22-23, applicants argue that there is no disclosure or suggestion in Kuo et al, or any other reference, of the control means further comprising an adjuster part connected to the clock generating part for receiving a clock signal, and for adjusting a size of the clock signal according to a control signal from selection means.

In response, the examiner respectfully disagrees. It is noted that the horizontal and vertical shift register of Kuo et al would adjusting a size of the pixel clock based on the horizontal counter and vertical counter disclosed in col. 7, lines 6-23.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 4-12, 15-22, 27-29, 31-34 and 37 are rejected under 35 U.S.C. 102(e) as being anticipate by Kuo et al. (US Patent No. 6,226,040 B1).

In considering claim 1, Kuo et al discloses all the claimed subject matter, note 1) the claimed a displaying part for displaying a picture is met by the video display device 250 (Fig. 2, col. 5, lines 26-37), 2) the claimed a selection input part for selecting for display a highlight portion within the picture of the displaying part is met by the infrared transmitter 260 which transmitted the selection input from the remote controller (Fig. 2, col. 5, lines 12-25), 3) the claimed a storage part for storing selection data according to the selection made through the selection input part is met by the storage device 267 which stored the position of the selected area (Fig. 2, col. 5, line 61 to col. 6, line 5), 4) the claimed a controller for generating a highlight signal corresponding to the highlight portion based the selection data, for composing the highlight signal with video signals to thereby generate composed video signals, and for displaying the highlight portion within the picture of the displaying part based on the composed video signals is met by the OSP signal generator 330 and the digital image processor 300 (Figs. 2-4, col. 5, line 61 to col. 7, line 33), and 5) the claimed wherein the controller performs at least one of

adding the highlight signal to the video signals to thereby increase the level of the composed video signals of the highlight portion and subtracting the highlight signals from the video signals to thereby decrease the level of the composed video signals of the highlight portion is met by the presenter uses **the remote controller to change the scope, position, color, brightness, and even the number of the selected area(s)**, the micro-processor 263 sends a parameter setting signal 350 to the OSP signal generator 330, thus the OSP signal generator 330 generates the control signal 310, it is noted that changing the color, brightness, and even the number of the selected area(s) inherent increase (adding) or decrease (subtracting) the level of the composed video signals of the highlight portion.

In considering claim 4, the claimed wherein the selection input part comprises a size control key for controlling a size of the highlight portion is met by the control signal 310 which is generated by the OSP signal generator 330 and the user can optionally adjust the position and size of the selected area (Fig. 2, col. 2, lines 50-55 and col. 5, line 61 to col. 6, line 39).

In considering claim 5, the claimed wherein the selection input part comprises a position control key for controlling a position of the highlight portion is met by the control signal 310 which is generated by the OSP signal generator 330 and the user can optionally adjust the position and size of the selected area (Fig. 2, col. 2, lines 50-55 and col. 5, line 61 to col. 6, line 39).

In considering claim 6, the claimed wherein the highlight signal comprises at least one color signal corresponding to the video signals; and the selection input part

comprises a signal control key for controlling a level of said at least one color signal is met by the control signal 310 which is generated by the OSP signal generator 330 and the user can optionally adjust the colors and the brightness of the pixels within the selected area(s) (Fig. 2, col. 2, lines 50-55 and col. 5, line 61 to col. 7, line 67).

Claim 7 is rejected for the same reason as discussed in claim 6.

Claim 8 is rejected for the same reason as discussed in claim 6.

Claim 9 is rejected for the same reason as discussed in claim 5.

Claim 10 is rejected for the same reason as discussed in claim 6.

Claim 11 is rejected for the same reason as discussed in claim 1.

Claim 12 is rejected for the same reason as discussed in claim 1.

Claims 15-17 are rejected for the same reason as discussed in claims 4-6, respectively.

Claim 18 is rejected for the same reason as discussed in claim 6.

Claim 19 is rejected for the same reason as discussed in claim 5.

Claim 20 is rejected for the same reason as discussed in claim 6.

Claim 21 is rejected for the same reason as discussed in claim 6.

Claim 22 is rejected for the same reason as discussed in claim 1 and further the claimed wherein said control means further comprises an image sharpness part connected between said selection means and said signal composing part for adjusting a signal size representing a borderline of the highlight portion according to a selection by said selection means, and for supplying the adjusted signal size to said signal comprising part is met by the digital image processor 300, when the presenter uses the

remote controller to change the scope, position, color, brightness, and even the number of the selected area(s) (Fig. 2, col. 6, lines 6-24)..

In considering claim 27, the claimed wherein said displaying means comprises an on screen display (OSD) selecting part and a control key part for controlling a size and a position of the highlight portion is met by the remote controller which changes the scope, position, color, brightness, and even the number of the selected area(s), the micro-processor 263 sends the parameter setting signal 350 to the OSP signal generator 330, thus the OSP signal generator 330 generates the control signal 310 (Figs. 2 and 3, col. 5, line 61 to col. 6, line 24).

In considering claim 28, the claimed wherein said control key part comprises a size control key for controlling the size of the highlight portion, a position control key for controlling the position of the highlight portion, and a signal control key for controlling a value of the highlight signal is met by the remote controller which changes the scope, position, color, brightness, and even the number of the selected area(s), the micro-processor 263 sends the parameter setting signal 350 to the OSP signal generator 330, thus the OSP signal generator 330 generates the control signal 310 (Figs. 2 and 3, col. 5, line 61 to col. 6, line 24).

In considering claim 29, the claimed wherein said control means further comprises a adjuster part for adjusting the picture in response to external signals adjusted by said control key part is met by the OSP image processor 231 (Fig. 3, col. 6, line 25 to col. 7, line 67).

In considering claim 31, the claimed wherein a user can employ the OSD selecting part to select the OSD so that said highlight portion and said OSD are displayed simultaneously is met by the OSP image processor 231 (Fig. 3, col. 6, line 25 to col. 7, line 67).

Claim 32 is rejected for the same reason as discussed in claim 1 and further the claimed wherein said control means further comprises a clock generating part for generating a clock signal to set up a size and a position of the highlight portion is met by the pixel clock which is timing of displaying the further data (Fig. 3, col. 6, line 25 to col. 7, line 67).

In considering claim 33, the claimed said control means further comprising an adjuster part connected to said clock generating part for receiving the clock signal, and for adjusting a size of the clock signal according to a control signal from said selection means is met by the vertical pixel shift register 404 and the horizontal shift register 402 (Fig. 3, col. 6, line 25 to col. 7, line 67).

In considering claim 34, the claimed said control means further comprising input terminals for receiving a control signal for controlling brightness of the video signals is met by the first brightness control device 525 and the second brightness control device 526 (Fig. 3, col. 6, line 25 to col. 7, line 67).

Claim 37 is rejected for the same reason as discussed in claims 28 and 29.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 30 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuo et al (US Patent No. 6,226,040 B1)

In considering claim 30, Kuo et al disclose all the limitations of the instant invention as discussed in claims 1 and 22 above, except for providing the claimed wherein selection of highlighting by a user through said selection means causes highlight signals to be supplied to said adjuster part through an SCL port and an SDA port connecting said selection means to said control means. The capability of using an SCL port and an SDA port connecting said selection means to said control means old and well known in the art. Therefore, the Official Notice is taken. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the old and well known of using an SCL port and an SDA port connecting said selection means to said control means into Kuo et al's system since it merely amounts of selecting available ports.

Claim 36 is rejected for the same reason as discussed in claim 30 above.

6. Claims 23-24 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuo et al (US Patent No. 6,226,040 B1) in view of Suen et al. (US Patent No. 6,552,750B1).

In considering claim 23, Kuo et al disclose all the limitations of the instant invention as discussed in claims 1 and 22 above, except for providing the claimed

wherein said highlight signal generating part comprises an R highlight signal generating part, a G highlight signal generating part, and a B highlight signal generating part for generating R, G and B highlight signals, respectively. Suen et al teach that the data separator 35 separates the different (red, green, blue) color values so that they may be handled individually and transfers the separated values to the mixer 36 where they are selected for transfer to the display 24 (Fig. 2, col. 5, lines 24-44). Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to incorporate the different (red, green, blue) color values as taught by Suen et al into Kuo et al's system in order to change the size of graphic date for presentation on an television output display.

In considering claim 24, the claimed wherein the video signals generated by said signal generating means comprise R, G and B video signals, and R highlight signal generating part, the G highlight signal generating part, and the B highlight signal generating part adjust the sizes of the R, G and B video signals, respectively is met by the separator 35 which separates the different (red, green, blue) color values so that they may be handled individually and transfers the separated values to the mixer 36 where they are selected for transfer to the display 24 (Fig. 2, col. 5, lines 24-44) of Suen et al.

In considering claim 35, Kuo et al disclose all the limitations of the instant invention as discussed in claims 22 and 34 above, except for providing the claimed said video signals comprising R, G and B signals, and said input terminals receiving R-brightness, G-brightness and B-brightness signals, respectively. Suen et al teach that

the data separator 35 separates the different (red, green, blue) color values so that they may be handled individually and transfers the separated values to the mixer 36 where they are selected for transfer to the display 24 (Fig. 2, col. 5, lines 24-44). Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to incorporate the different (red, green, blue) color values as taught by Suen et al into Kuo et al's system in order to change the size of graphic date for presentation on an television output display.

7. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuo et al (US Patent No. 6,226,040 B1) in view of Kim (US Patent No. 6,473,130B1).

In considering claim 26, Kuo et al disclose all the limitations of the instant invention as discussed in claims 1 and 22 above, except for providing the claimed said signal composing part combines the video signals generated by said signal generating means with borderline signals indicating the borderline of the highlight portion outputted by said image sharpness part, and outputs a resultant combined signal to said displaying means. Kim teaches that the sub-picture display apparatus according to the present invention provides an effect capable of distinctively displaying the sub-picture more definitely and clearly, by thickening the boundary portion of the sub-picture and varying the brightness of the sub-picture to become brighter, in the case that the main picture is complicated spatially or an amount of temporal movement of the main picture is large (Fig. 4, col. 3, line 5 to col. 4, line 8). Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to incorporate thickening the boundary portion of the sub-picture as taught by Kim into Kuo et al' system in order to

display a sub-picture in which the display state of the sub-picture is varied according to an image complexity and/or a degree of movement of a main picture, to thereby allow the sub-picture to be always distinct irrespective of the image state of the main picture (col. 1, lines 54-60).

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trang U. Tran whose telephone number is (571) 272-7358. The examiner can normally be reached on 8:00 AM - 5:30 PM, Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

May 14, 2007

Trang U. Tran
Primary Examiner
Art Unit 2622